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STATE DOCUMENTS

State of Montana  
State Department of Health

AUG 24 1973

JOHN S. ANDERSON, M.D.  
EXECUTIVE OFFICER

HELENA, MONTANA

August 17, 1973

Gentlemen:

The enclosed Environmental Impact Statement has been prepared for the proposed Silver Rock Pines Subdivision located near Big Arm in Lake County, Montana.

Under Montana law, a person or agency has thirty days to submit comments and/or supply additional information. An additional fifteen days may be granted upon specific request to an individual or agency.

After thirty days, the project will be reviewed in light of comments received that are applicable under Montana law.

Sincerely,

*David A. Nunnallee*

David A. Nunnallee, P.E.  
Public Health Engineer  
Environmental Sciences Division

DAN/kmh

Enclosure

Montana State Library



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JOHN S. ANDERSON, M.D.  
EXECUTIVE OFFICER

State of Montana  
State Department of Health  
AND ENVIRONMENTAL SCIENCES  
HELENA, MONTANA

August 17, 1973

DRAFT

ENVIRONMENTAL IMPACT STATEMENT

for

Silver Rock Pines Subdivision

Lake County, Montana

Pursuant to the Montana Environmental Policy Act, Section 69-6504 (b) (3), the act controlling both public and private water supply and sewage disposal for subdivisions, Section 69-5001 to 5005; and the act to control water pollution, Section 69-4801 to 4827, the following impact statement is prepared by the State Department of Health and Environmental Sciences, Environmental Sciences Division, concerning the proposed Silver Rock Pines Subdivision, located near Big Arm in Lake County, Montana.

Description of Project and Proposed Action

The Montana State Department of Health and Environmental Sciences has received a request for approval of an 80 acre subdivision, located about 7 miles East of Elmo, Montana. The proposed subdivision occupies all of the E $\frac{1}{4}$ , NE $\frac{1}{4}$ , Sec. 36, T24N, R21W, PMM, near the shore of Flathead Lake. The nearest lots would be some  $\frac{1}{4}$  mile from Flathead Lake, and the developer maintains that the development will not be visible from the lake.

The owner and developer is Mr. William Barba of Missoula, and preliminary engineering and surveying was done by Robert Shelton & Associates, also of Missoula.

The proposed subdivision consists of 47 lots on 80 acres with the smallest lot approximately one acre in size. Some 9,000 feet of 60 foot road will occupy a portion of the 80 acres.



Water would be supplied by individual wells, and sewage disposal would be by means of individual septic tank and drainfield systems.

#### Topography and Soils

The topography in the proposed subdivision area is variable with slopes varying from about 4% slope in lots 12 and 19, to as much as 29% slope in lot 33, according to the developer's topographic map. Access roads have been designed to follow the topography as much as possible. Four cul-de-sac's will provide private access to nearly half of the lots, with the remainder having access from the main development road.

The area is presently heavily forested with timber which the developer reports to be about 75 years old.

Two test holes have been dug, and have been inspected by a representative of the State Department of Health, who stated that the soil appears suitable for sewage disposal. Soil percolation tests were made for all 47 lots and are discussed under sewage disposal.

#### Flood Plain, Groundwater, Surface Waters

No portion of the proposed subdivision has been flooded in recorded history, nor is high groundwater a concern. No surface waters exist within the area and Flathead Lake is far enough distant to prevent any serious threat of pollution.

#### Sewage Disposal

Soil percolation tests conducted for all 47 lots indicate a range of percolation rates from 2.5 to 12 minutes per inch. The average percolation rate is about 6.5 minutes per inch. These percolation rates are rather slow, but are adequate for drainfields on relatively flat slopes. Experience has shown that drainfields constructed on slopes in excess of about 15% are prone to failure laterally, and this is considerably aggravated if the soil is "tight", or has a slow percolation rate. In general, the steeper lots in the proposed subdivision have reasonably good percolation. Several lots in the north central portion of the subdivision appear ideally suited for sewage disposal, with relatively flat terrain and good percolation rates. The following lots however, appear to have minimum slopes in excess of 15%:

Lot No.	Approximate	Percolation
	Minimum Slope	Rate (min/in)
24	16%	12
28	16	5.6
33	18	5.3
34	17	4.6
35	17	3.2
36	18	5.2
45	18	4.3



On several of the above lots, septic systems would have to be carefully placed to take advantage of the minimum slopes, as average slopes on the lots may be considerably steeper. The flatter portions of lots normally are the choice building sites, so conflicts for use of such areas should be considered. Of the above lots, only one has a particularly slow percolation rate, lot 24, which has a slope of only marginal concern. Another area should be sought within lot 24 which is more suitable for percolation.

#### Water Supply

Water is to be supplied by individual wells. The owner has proof of water availability in his own 202 foot drilled well which delivers 20 gallons per minute.

#### Solid Waste Disposal

Garbage pickup will be provided by contract, with final disposal at the Lake County Landfill.

#### Air Pollution

The developer has personally worked the proposed subdivision area for several years, removing underbrush, and constructing roads. These roads will be dust coated to prevent dust, and little burning will be necessary as most of the brush has been removed. Covenants will allow selective logging, which will result in slash burning. The total air pollution impact of this development is expected to be negligible.

#### Probable Impact on Environment

When fully developed, the proposed subdivision will cause an influx of as many as 47 families into an area of 80 previously undeveloped acres. The local impact will be substantial, with the plot of ground permanently converted from a semi-wild state to a potential suburban one.

While none of the lots border Flathead Lake, lot owners would have beach rights. Thus some impact can be expected on the recreational use of Flathead Lake.

The developer reports that the area is used to some extent as winter range for Whitetail deer. Additional comments in this regard are solicited from the Montana Fish & Game Department. Ultimate development of the subdivision would preclude or severely restrict big game use of this area.





Aesthetically, the developer has made considerable effort to provide large, contoured lots with minimal visual problems. Protective covenants will be written, although this office presently is not aware of their content.

#### Short Term vs. Long Term Uses of the Environment

A land subdivision is a permanent, long-term commitment of land, and residential housing will permanently preclude the use of the land for any other major use. The roads and eventual structures will be permanent for the foreseeable future. Subdivided land is politically extremely difficult to reconsolidate, so the proposed lot lines will become essentially permanent fixtures.

#### Irreversible and Irretrievable Commitments of Resources

As mentioned above, approval of this subdivision will irreversibly commit 80 acres of land to residential use for the foreseeable future. These 80 acres will eventually be taken out of productive timber production, and other present uses of the land, such as game range, will eventually be eliminated as the area is developed.

#### Alternatives to Proposed Action

1. No Development  
The area could be left in its present state with no further development. This is of course, economically unattractive to the land owner.
2. Park or Preserve  
The area could be preserved as a park or game refuge area. Such use would require a sponsor to buy or lease the land, and there seems to be little special attraction which would make this 80 acre tract unique or of special interest as a park or preserve.
3. Timber Management  
The land could be used indefinitely as a timber production area, providing wood and fibre resource for the economy on a long term basis. The short term gain for the developer would be much less than with the subdivision, and taxes on such land would reduce timber profits substantially.
4. Other  
A number of other uses of such an area can be surmised, but no other successful uses of such land in this particular area come to mind.



Sources of Information

Data and information for this statement was provided by the developer and his engineer, and was supplemented by a field inspection of the area by an engineer of the Environmental Sciences Division of the State Health Department.

This Statement has been prepared by:

David Nunnallee, BSCE, MSCE, PE, Public Health Engineer for the Montana State Department of Health and Environmental Sciences. Related experience includes six years of work as a sanitary engineer for the States of Washington and Montana.

Copies sent to:

1. Mr. William Barba, 2603 View Dr., Missoula, MT 59801
2. Mr. Fletcher Newby, Montana Environmental Quality Council, Helena, MT 59601
3. Montana Fish and Game Department, Helena, MT 59601
4. Montana State Highway Department, Helena, MT 59601
5. Montana State Department of Health and Environmental Sciences, Kalispell, MT
6. Montana State Department of Health and Environmental Sciences, Helena, MT 59601
7. Dr. John Tibbs, University of Montana Biological Station, Yellow Bay, MT 59911
8. Montana State Department of Intergovernmental Relations, Division of Planning and Economic Development, Capitol Station, Helena, MT 59601
9. Mr. Ben Wake, Administrator, Environmental Sciences Division, Helena, MT 59601
10. Bureau of Indian Affairs, P.O. Box 318, St. Ignatius; Attn: Mr. John Lozeau
11. Board of County Commissioners, Lake County, Polson, MT 59860
12. Ralph K. Campbell, M.D., Lake County Health Officer, Polson, MT 59860
13. Singleton D. McMullan, SUD, Health Officer, Flathead Indian Reservation, Public Health Center, St. Ignatius, MT 59865
14. Mr. Al Hawkaluk, Lake County Sanitarian, P.O. Box 1210, Polson, MT 59860
15. Mr. Wayne Herman, President, Flathead Wildlife Inc., P.O. Box 4, Kalispell, 59901
16. Mr. John Cochran, President, Flathead Lakers, Inc., P.O. Box 447, Big Arm, MT 59910
17. Dr. Lawrence Sonstelie, President, Flathead Valley Community College Ecology Club
18. Polson Out-doors, Inc. P.O. Box 1432, Polson, MT 59860
19. Student Environmental Research Center, Room 212 Venture Center, Missoula, MT
20. Mr. Bob Muth, Montana Wilderness Association, Flathead Chapter, Rt. 4, Kalispell
21. Montana Outdoors Writers Association, c/o Dale Burke, Exec. Sec., Rt. 2, Box 144 B, Stevensville, MT 59870
22. Mrs. Betty L. Waddell, Arlee Council, Flathead Reservation Area Development Council. Mountain Home, Arlee, MT 59821
23. Montana State Library, 930 E. Lyndale, Helena, MT 59601
24. Mr. William Keefe, West Shore, Flathead Lake, 59860





